

North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor Dee Freeman, Secretary

December 17, 2010

Sent Via US Mail and Via Email – buddy.norris@averycountync.gov

Mr. Buddy Norris Avery County Solid Waste Director P.O. Box 640 Newland, NC 28657

Re: Landfill Gas Off-Site Investigation

Avery County MSW Landfill - Closed

Permit Number 06-01

Dear Mr. Norris:

The Solid Waste Section has completed a review of the *Landfill Gas Off-Site Investigation* dated November 19, 2010 (Doc ID 12392) submitted on behalf of Avery County by RSG for the closed Avery County MSW Landfill. The *Landfill Gas Off-Site Investigation* was provided in response to landfill gas concentration exceedances near the MSW landfill property line within landfill gas probes P-3 and P-7.

The investigation was conducted at the following locations: (1) along the property line of the MSW landfill; (2) on the Unimin Corporation property located to the north across Brushy Creek Road (near P-3) and to the south of the MSW landfill (near P-7); and (3) on the Avery County Airport Authority property located to the west of the MSW landfill (near P-7).

Based upon the investigation, it appears that landfill gas has migrated onto the Unimin property north of Brushy Creek Road and onto the Avery County Airport property west of the MSW landfill. Therefore Avery County recommends the following:

- 1. Installation of three permanent landfill gas monitoring probes on the Unimin property north of Brushy Creek Road. The probe installations depend upon the outcome of ongoing discussions with Unimin to allow this work to be completed.
- 2. Installation of two permanent landfill gas monitoring probes on the Avery County Airport property.
- 3. Implementation of monthly monitoring at all eight permanent landfill gas monitoring probes and any permanent off-site probes installed based on this investigation. Monthly monitoring in and around buildings in the vicinity of the determined landfill gas plume (on the Avery County airport property) should also be conducted.
- 4. Preparation of a Remediation Plan to mitigate the migration of landfill gas off the property. This plan may include, but is not limited to, expanding the current landfill gas collection and control system or installing passive relief vent trenching.



As a result, the *Landfill Gas Off-Site Investigation* is approved as described for immediate implementation with one exception. Pursuant to the *Landfill Gas Guidance Document* dated November 2010, please use the term landfill gas monitoring well instead of landfill gas monitoring probe because the landfill gas monitoring wells will be permanent. Also, the permanent landfill gas monitoring wells must be equipped with a stopcock valve or a quick connect coupling on the cap and must also be capped, locked, and labeled with a permanently affixed identification plate stating the well contractor name and certification number, date of well competition, total depth of well, screen length and well ID number.

If you have any questions or concerns regarding this letter, please contact me at 919-508-8500 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,

Jaclynne Drummond Hydrogeologist

Environmental Compliance

Solid Waste Section

cc via email: Mark Poindexter, Field Operations Supervisor

Deb Aja, Western District Supervisor

Bill Wagner, Environmental Senior Specialist